



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/612,091	07/02/2003	Theodore M. Lach III	13822	5805

7590 07/31/2006

PAUL F. DONOVAN
ILLINOIS TOOL WORKS INC.
3600 WEST LAKE AVENUE
GLENVIEW, IL 60025

EXAMINER

JACKSON, MONIQUE R

ART UNIT PAPER NUMBER

1773

DATE MAILED: 07/31/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/612,091

Applicant(s)

LACH ET AL.

Examiner

Monique R. Jackson

Art Unit

1773

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 April 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,4,6,7 and 9-20 is/are pending in the application.
- 4a) Of the above claim(s) 10-20 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,4,6,7 and 9 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 3/21/06 has been entered. Claims 1, 4, 6, 7 and 9-20 are pending in the application. Claims 10-20 have been withdrawn from consideration.
2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. Claims 1, 4, 6, 7 and 9 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The claims have been amended to recite that the "concentration" of the individual components is on a weight basis of the sealant material, however, the original disclosure at the time of filing does not appear to support the "by weight" limitation.

Art Unit: 1773

5. Claims 1, 4, 6, 7 and 9 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 1 recites, "A sealing element comprising: a desirably shaped body of a sealant material,... wherein the sealant material, when positioned about a first component is overmolded with a material forming a second component, the sealant material, being heat activated, forms a seal between the first and second components" (emphasis added.) It is unclear from the claim whether the limitation at lines 10-12 with respect to the "when positioned" refers to intended use of the sealing element or whether the "sealing element" includes the first and second components.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

7. Claims 1, 4, 7, and 9 are rejected under 35 U.S.C. 102(a) or (e) as being anticipated by Blank et al (USPN 6,319,964.) Blank et al teach a heat-expandable molded synthetic resin seal and baffle components adapted for use in automobile body cavities or the like wherein the molded components are formed from a synthetic resin comprising grafted olefinic anhydride polymer, particularly ethylene polymers, present in the composition on a wt % basis of from about 10 to about 60% (*reads upon the "second polymer being an ethylene polymer" in an*

Art Unit: 1773

amount of about 20 to about 35 percent by weight); about 1 to about 10wt% of a terminal epoxide polymer additive (reads upon about 2 to about 5 percent by weight of an epoxy resin); about 1 to about 10wt% of a blowing agent; about 1 to about 50wt% of a filler polymer, preferably ethylene-vinyl acetate (reads upon ethylene vinyl acetate copolymer in an amount of about 25 to about 40 percent or about 25 to about 30 percent by weight); about 1 to about 15wt% of a tackifier, preferably a hydrocarbon resin (reads upon about 1 percent to about 15 percent or about 10 to about 15 percent by weight of a hydrocarbon resin); about 1 to about 20wt% of an inorganic or organic filler, preferably calcium carbonate (reads upon calcium carbonate inert mineral filler in an amount of about 20 to about 45 percent by weight); and preferably about 0.01-0.1 wt% of a photoinitiator (reads upon activator in about less than one percent) and about 1-10wt% of a reactive resin system ; wherein all weight are based upon the total weight of the composition taken as 100% by weight (Abstract; Col. 3, lines 33-67; Col. 4, line 1-Col. 5, line 25.)

Claim Rejections - 35 USC § 103

8. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Blank et al. The teachings of Blank et al are discussed above. Though Blank et al teach that the synthetic resin comprises a filler, preferably calcium carbonate, in an amount ranging on a weight basis from about 1 to about 20% on a weight basis, based upon the total weight of the composition taken as 100% by weight; Blank et al do not specifically teach amounts greater than 20% on a weight basis, particularly “about 25 percent to about 30 percent by weight” as instantly claimed. However, considering the instant claims nor the specification clearly recite that the claimed weight percentages are required to total 100wt%, and considering about 20% as taught by Blank

Art Unit: 1773

et al is close to the “about 25 percent by weight” instantly claimed, it would have been obvious to one having ordinary skill in the art at the time of the invention to utilize weight percentages as instantly claimed wherein one skilled in the art would have been motivated to utilize routine experimentation to determine the optimum amount of filler to provide the desired reinforcing or mechanical properties for a particular end use, wherein it is known in the art that the amount of filler is a known result-effective variable.

9. Claims 1, 4, 6, and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Knight et al (USPN 4,619,848) for the reasons recited in the prior office action and restated below, and as evidenced by Blank et al, or Douglas (USPN 4,680,316) or Bryant et al (USPN 3,872,548) or Samuel et al (USPN 4,360,120) or Takago et al (USPN 4,376,192) wherein the Examiner takes the position that the limitation at lines 9-11 of Claim 1, namely “wherein the sealant material, **when positioned** about a first component is overmolded...” (*emphasis added*) constitutes intended use of the instantly claimed sealing material and considering the sealing material taught by Knight et al is also capable of functioning in the same manner, the limitation does not provide any patentable difference over the sealing material taught by Knight et al.

10. Knight et al teach a composition and method for sealing containers wherein the sealing gasket for the inner surface of the container closure comprises a blend of 55 to 99% ethylene vinyl acetate (EVA) copolymer having a vinyl acetate content of less than 25% and 1 to 50% of polyethylene (PE) (Abstract; Col. 1, lines 37-49) and the composition may further comprise below 25% of a plasticizer such as a hydrocarbon resin, preferably from 5 to up to 15%; below 20% of a slip aid, preferably 1 to 3%; below 10% of non-fusible material such as titanium dioxide, clay or other inorganic pigments or filler, preferably 0.5 to 3% by weight of the organic

Art Unit: 1773

components; and other minor components, for example antioxidants, below 10%, preferably below 5%, by weight of the organic components (Abstract; Col. 1, lines 36-67; Col. 2, lines 17-35 and 54-58; Col. 2, line 64-Col. 3, line 8.) Knight et al specifically teach that the composition may comprise 50 to 99wt% of said blend of EVA and PE (said blend comprising 50 to 99% EVA and 1 to 50% PE), 0 to 25% by weight plasticizing resin (*reads upon hydrocarbon resin*), 0.2 to 20% by weight slip agent and 0 to 10% by weight non-fusible material (*both read upon inert filler material*), and hence would read upon the instantly claimed percentages wherein EVA is the first polymer and PE is the second polymer. Though Knight et al teach that the composition may comprise various additives including pigments and slip agents, Knight et al does not specifically teach utilizing calcium carbonate in the instantly claimed percentage. However, calcium carbonate is an obvious species of filler material or inorganic pigment utilized in the sealant art as evidenced by Blank et al (as discussed above) or Douglas (Col. 1, lines 47-48; Col. 2, lines 43-49) or Bryant et al (Col. 4, lines 24-30) or Samuel et al or Takago et al (Col. 8, lines 62-67), and would have been obvious to one having ordinary skill in the art at the time of the invention.

Response to Arguments

11. Applicant's arguments with respect to claims 1, 4, 6, 7 and 9 have been considered but are moot in view of the new ground(s) of rejection.

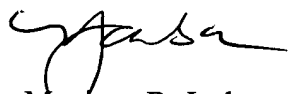
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Monique R. Jackson whose telephone number is 571-272-1508.

The examiner can normally be reached on Mondays-Thursdays, 8:00AM-4:30PM.

Art Unit: 1773

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Carol Chaney can be reached on 571-272-1284. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Monique R. Jackson
Primary Examiner
Technology Center 1700
July 24, 2006